

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/446,545	03/16/2001	Juergen Kockmann	P99,2690	2480	
29177	7590 12/15/2003		EXAMINER		
BELL, BOYD & LLOYD, LLC			HYUN, S	HYUN, SOON D	
P. O. BOX 1135 CHICAGO, IL 60690-1135			ART UNIT	PAPER NUMBER	
			2663		
			DATE MAILED: 12/15/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/446,545	KOCKMANN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Soon-Dong Hyun	2663				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period volume to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 28 A	<u>ugust 2003</u> .					
2a) This action is FINAL . 2b) ☐ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) 11-19 is/are pending in the application	4)⊠ Claim(s) 11-19 is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>16-19</u> is/are allowed.	☑ Claim(s) <u>16-19</u> is/are allowed.					
6) Claim(s) <u>11-13 and 15</u> is/are rejected.	☐ Claim(s) <u>11-13 and 15</u> is/are rejected.					
7)⊠ Claim(s) <u>14</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) \boxtimes The drawing(s) filed on <u>28 August 2003</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domesti since a specific reference was included in the first 37 CFR 1.78. a) The translation of the foreign language pro 14) Acknowledgment is made of a claim for domesti reference was included in the first sentence of the	is have been received. Is have been received in Application in the certified copies not received in Application of the certified copies not received in the certified copies not received in priority under 35 U.S.C. § 119(construction of the specification of the specification of the specification of the priority under 35 U.S.C. §§ 120	on No ed in this National Stage ed. e) (to a provisional application) in an Application Data Sheet. eeived. and/or 121 since a specific				
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Then iew Summan	(PTO-413) Paper No(s)				
2) Notice of Preferences Cited (PTO-932) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice of Informal F	Patent Application (PTO-152)				

Application/Control Number: 09/446,545

Art Unit: 2663

DETAILED ACTION

· Response to Amendment

1. Applicant's arguments with respect to claims 12 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohani et al (U.S. Patent No. 5,390,166).

Regarding claim 11, Rohani et al (Rohani) discloses a method for digital radio transmission of data between a fixed station (14) and at least one mobile station (17) at one of a number of carrier frequencies, the method comprising the steps of:

transmitting data in a number of time slots (41 of each frame in FIG. 4) using a time-division multiplex method (col. 2, lines 4-9), the data being transmitted in active time slots (41 of each frame) each of which is followed by an inactive time slot (42) in which no data is transmitted, the inactive time slot having a time duration shorter than a time duration of an active time slot (col. 4, lines 13-17); and

changing from a first carrier frequency to a second carrier frequency after a predetermined time period having an order of magnitude of one time slot, wherein change from

Application/Control Number: 09/446,545 Page 3

Art Unit: 2663

the first carrier frequency to the second carrier frequency is performed during the inactive time slot by a RF module (Frequency Synthesizer 21).

Regarding claim 13, Rohani further discloses that the data is transmitted using a time-division multiplex duplex method, see FIG. 4

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani et al (U.S. Patent No. 5,390,166)..

Regarding claim 12, refer to the discussion for claim 11. However, Rohani et al (Rohani) does not explicitly teach that a time duration of the inactive time slot is half of the active time slot. With reference to the col. 4, lines 13-18, slot 42 and slot 43 could be combined in one time

Page 4

Application/Control Number: 09/446,545

Art Unit: 2663

slot. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate an inactive time slot having half-time duration as claimed without deviating from the broad principle and sprit of the present invention of Rohani.

Regarding claim 15, Rohani does not explicitly teach that the data is transmitted in a 2.4 GHz band. It would have been obvious to one having ordinary skill in the art to incorporate the method of Rohani into 2.4 GHz band to use for ISM band without deviating from the broad principle and sprit of the present invention of Rohani.

Allowable Subject Matter

- 7. Claims 16-19 are allowed.
- 8. Claims 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Application/Control Number: 09/446,545

Art Unit: 2663

10. Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to: 703-872-9306 for formal communications intended for entry with a label of "OFFICIAL" and for informal or draft communications with a label of "PROPOSED" or "DRAFT" (attn: Art Unit 2663, Soon-Dong Hyun).

S. Hyun

12/09/2003

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Chone T. N. fixen